

Amendments to the Claims

1. (Previously Presented) A capacitive sensing device for use in a keypad assembly of an electronic system, said capacitive sensing device comprising:

a substantially transparent single sheet capacitive sensor, said substantially transparent single sheet capacitive sensor configured to be disposed within said keypad assembly without requiring the formation of key post holes therethrough, said substantially transparent single sheet capacitive sensor is coupled to a keymat having a plurality of keys formed therein, said substantially transparent single sheet capacitive sensor integrated within said keymat; and
said substantially transparent single sheet capacitive sensor having a flexibility which enables desired tactile response during use of said plurality of keys of said keypad assembly.

2. (original) The capacitive sensing device of Claim 1, wherein said substantially transparent single sheet capacitive sensor comprises:

a substantially transparent substrate;
a first pattern of conductive sensors disposed above said substantially transparent substrate, said first pattern of conductive sensors comprised of a substantially transparent material and disposed within a sensing region;
a second pattern of conductive sensors disposed above said substantially transparent substrate, said second pattern of conductive sensors comprised of said substantially transparent material and disposed within said sensing region, said substantially transparent material of said first pattern of conductive sensors and said substantially transparent material of said second pattern of conductive sensors disposed in a common single layer above said substantially transparent substrate; and
a plurality of conductive bridges disposed to electrically couple portions of said second pattern of conductive sensors.

3. (original) The capacitive sensing device of Claim 2, wherein said plurality of conductive bridges is opaque.

4. (original) The capacitive sensing device of Claim 2, wherein said substantially transparent material comprises indium tin oxide.

5. (original) The capacitive sensing device of Claim 2, wherein said first pattern of conductive sensors further comprises:

at least a portion comprised of a substantially opaque conductive material electrically coupled to said substantially transparent material of said first pattern of conductive sensors.

6. (original) The capacitive sensing device of Claim 5, wherein said portion of said substantially opaque conductive material further comprises openings extending therethrough such that light is able to pass through said openings of said substantially opaque conductive material.

7. (original) The capacitive sensing device of Claim 5, wherein said first pattern of conductive sensors is disposed to minimize capacitive interference with at least one of said plurality of conductive bridges.

8. (original) The capacitive sensing device of Claim 5, wherein said portion of said substantially opaque conductive material overlies at least a portion of said substantially transparent material of said first pattern of conductive sensors.

9. (original) The capacitive sensing device of Claim 5, wherein said substantially opaque conductive material comprises conductive ink.

10. (original) The capacitive sensing device of Claim 2, wherein said second pattern of conductive sensors further comprises:

at least a portion comprised of a substantially opaque conductive material electrically coupled to said substantially transparent material of said second pattern of conductive sensors.

11. (original) The capacitive sensing device of Claim 10, wherein said portion of said substantially opaque conductive material overlies at least a portion of said substantially transparent material of said second pattern of conductive sensors.

12. (original) The capacitive sensing device of Claim 10, wherein said portion of said substantially opaque conductive material of said second pattern of conductive sensors further comprises openings extending therethrough such that light is able to pass through said openings of said substantially opaque conductive material.

13. (original) The capacitive sensing device of Claim 2, wherein said plurality of conductive bridges is selectively disposed to lessen visual interference with indicia of said keys of said keypad assembly.

14 - 68. (canceled)